



Minnesota Pollution Control Agency (MPCA)

MANAGING STORM WATER SEDIMENTS

Controlling storm water and snowmelt runoff are pollution control activities undertaken by cities, counties, and private firms. Proper removal, transport and disposal of the sediments produced through these activities is an important part of the project. This fact sheet is intended to provide guidance on disposal practices for sediments from construction activities, publicly-owned storm water ponds and storm water system grit chambers.

By following these guidelines carefully and completely, you can make sure that your project is protecting the environment.

GENERAL GUIDELINES FOR DISPOSAL

Storm water sediments removed from publicly-owned systems are generally considered safe and acceptable for use as fill in many upland areas. (Upland areas are areas away from water bodies and wetlands.)

Sediments should never be disposed of in water or allowed to erode into waters, including wetlands. In choosing the area to place the fill, the MPCA recommends that you maintain the separation distances outlined in the table below:

Separation Distances for Using Sediments as Fill	
Distance from surface water (including wetlands)	100 feet
Distance from streets, sidewalks, other drainage ways	100 feet
Depth to ground water	3 feet
Depth to fractured bedrock	10 feet



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Because sediments can easily erode, care should be taken to ensure that the materials do not erode from the disposal site. To prevent erosion, unless the fill is used on tilled farm land, the area should be seeded with a grass mixture or covered with mulch or other cover material within the following time frames:

Type of slope (horizontal : vertical)	Seed or cover within:
Steeper than 3:1	7 days
10:1 to 3:1	14 days
Flatter than 10:1	21 days

If the removed sediments contain liquid and need dewatering, a berm or other device should be placed around the disposal site to make sure the liquids do not escape during dewatering. Rain and snowmelt should be diverted around and away from the impounded sediment. This will prevent the liquid from carrying sediment back into a waterway.

SEDIMENTS NOT COVERED UNDER THESE GUIDELINES

Because some industrial sites may pose a greater environmental risk, the disposal guidelines in this fact sheet **do NOT** apply to sediments from industrial storm water ponds located on private property and permitted under the National Pollutant Discharge Elimination System (NPDES) program. To dispose of industrial pond sediments, you must obtain approval from the MPCA. Contact the MPCA's Water Quality Division at 612/296-7203 for more information.

In certain situations, municipal storm water sediments may become contaminated. Typically, this will occur when the area through which the storm water drains is the site of a major spill or on-going hazardous waste cleanup. When sediments are associated with such situations, these guidelines for disposal **do NOT** apply. In these cases, the sediments must be tested and handled appropriately, based on the testing. Contact the MPCA's cleanup coordinator for the specific spill or cleanup project.

The guidelines in this fact sheet **do NOT** apply to dredge spoil materials removed from lakes, rivers and wetlands. For dredging projects, you need to obtain a general or individual permit from the MPCA's Water Quality Division. Contact the MPCA at 612/296-7315 for more information on dredging projects.

REUSE IDEAS AND SUGGESTED DISPOSAL LOCATIONS

As long as the above guidelines are followed, many locations can benefit from reuse of sediments as fill material. Ideas include using dewatered sediment as fill in commercial/industrial development projects, on farm fields, on park lands, and other areas.

In some areas of Minnesota, fill materials are needed for use as daily cover on landfills. Dewatered storm water sediments may be used as daily cover material, although the MPCA recommends that they be used as cover on lined areas of sanitary landfills or on demolition landfills that have ground water monitoring systems. Individual counties may have additional restrictions; contact the county's solid waste officer for more information.

Areas to avoid for reuse of sediments include playgrounds, children's play areas, residential yards or courtyards where human contact occurs on a continuous basis. Also, because sediments usually have a fine texture, they should not be used as fill in areas that may be used in the future for on-site sewage treatment systems.

TIPS FOR REMOVAL AND TRANSPORTATION OF SEDIMENTS

Sediments from ponds, lakes, rivers, streams, harbors or other waters must be carefully removed to minimize turbidity, further sedimentation or other water quality impacts. Careful transportation of sediments to the disposal site is essential to prevent spills:

- Sediments should be transported by motor vehicle only after dewatering.
- Hydraulically-transported sediments should go only to a secure disposal facility designed to hold the entire volume of sediment and the transport water.
- In general, supernatant, underdrains or wash waters are prohibited from discharge to water bodies, except in unusual circumstances. The MPCA recommends that these waters be evaporated, recycled or discharged to a sanitary sewer system, with the approval of the wastewater treatment operator.
- Should a spill occur during transportation, cleanup of the spilled material should be started as soon as possible, within 24 hours. The spilled material should be cleaned up to the maximum extent practical.

MORE INFORMATION

For more information on disposal of sediments, contact the MPCA at 612/296-7315.